City of Angels

City of Angels Wastewater Treatment Plant Proposed Tentative NPDES Permit

Regional Water Quality Control Board, Central Valley Region Board Meeting – 3 May 2007 ITEM #6

1. In the NPDES Permit, Section II-E, page 2.

Modify the paragraph to read as follows:

California Environmental Quality Act (CEQA). The Regional Water Board determined that the proposed discharge to surface water, which may potentially reduce water quality has been adequately subjected to the environmental analyses in a mitigated negative declaration required under the California Environmental Quality Act (CEQA) (Public Resources Code section 21000 et seq) and considered the mitigated negative declaration in preparing this Order. Further, this action to adopt an NPDES permit is exempt from the provisions of CEQA in accordance with section 13389 of the CWC.

2. In the NPDES Permit, Section IV.A., Table- 6 and Fact Sheet, Table-11 and Table-12 (Effluent Limitations):

Modify the Tables as follows:

	Effluent Limitations			
Parameter		Average	Average	Maximum
	Units	Monthly	Weekly	Daily
BOD 5-day@20C	lbs/day		75 238	
TSS	lbs/day		75 238	
Ammonia	mg/l	2.6 2.8		5.3 5.6
	lbs/day	41 44		84 89
Bis(2-chloroethyl)ether	μg/l	0.025 0.031		0.050 0.062
Lead	μg/l	0.50 0.51		
Zinc	μg/l	13 20		

3. In the NPDES Permit, Section VI.C (Special Provisions) and Fact Sheet Section VII.B.2, page F- 42:

Add a new Item 'g' Hardness Based Effluent Limitations. <u>If the Regional Water Board implements a new policy for calculating hardness-based effluent limitations, this Order may be reopened to modify the effluent limitations for the applicable hardness-based constituents.</u>

City of Angels

City of Angels Wastewater Treatment Plant Proposed Tentative NPDES Permit

Regional Water Quality Control Board, Central Valley Region Board Meeting – 3 May 2007 ITEM #6

4. In the MRP, Section VIII.B.8, Table E-7. "Monitoring Periods and Reporting Schedule":

Under the last column titled SMR Due Date and the last row titled Annually, add the words <u>'following the year of sampling'</u> after February 1.

5. In the MRP, Section VIII.D.1, Table E-8. Reporting Requirements for Special Provisions Progress Reports:

Modify the Table as follows:

Pollution Prevention Plan for EC (Section VI.C.2.b) <u>'Salinity Evaluation and Minimization Plan (Section VI.C.3.a'.</u>

6. In the Fact Sheet, Section II.A, page F-5.

Modify 1st paragraph to read as follows:

The treatment system at the Facility consists of an ultrasonic influent flow meter, an automatic mechanical screen, two sequencing batch reactors, an intermediate storage basin, four sand filters, a chlorine contact chamber, a 3.0 million gallon influent <u>flow</u> equalization basin, a 66 million gallon storage pond (Holman Reservoir).

7. In the Fact Sheet, page F-12, Section IV.B.2.a

Modify the sentence to read as follows:

See Table F-3 F-2 for final technology-based effluent limitations required by this Order.

8. In the Fact Sheet, page F-13, Section IV.C.2.b. Last paragraph

Modify the last sentence to read as follows:

For purposes of establishing water quality-based effluent limitations, a reported receiving water hardness value of 28 mg/L as CaCO₃ was used

9. In the Fact Sheet, page F-15, Section IV.C.3.e., Ammonia.

Modify the fifth sentence in last paragraph, to read as follows: Using a pH value of 8.0 and the worst-case temperature values of 57.9°F (14.4°C) on a 30-day basis during the discharge period, the resulting effluent limitations are 2.6 2.8 mg/L (as N) for the average monthly effluent limitation and 5.3 5.6 mg/L (as N) for the maximum daily effluent limitation.

City of Angels

City of Angels Wastewater Treatment Plant Proposed Tentative NPDES Permit

Regional Water Quality Control Board, Central Valley Region Board Meeting – 3 May 2007 ITEM #6

10. In the Fact Sheet, page F-16, Section IV.C.3.f., Bis(2-chloroethyl)ether.

Modify the last sentence in third paragraph to read as follows: This Order includes an AMEL and MDEL for bis (2-chloroethyl)ether of 0.025 0.031µg/L and 0.05 0.062µg/L, respectively, based on the CTR criterion for the protection of human health (See Attachment F, Table F10 for WQBEL calculations).

11. In the Fact Sheet, page F-19, Section IV.C.3.k., Lead.

Modify the last sentence in third paragraph to read as follows: An AMEL and MDEL for total lead of $0.5\,0.51\,\mu\text{g/L}$ and $1.0\,\mu\text{g/L}$, respectively, are included in this Order based on CTR criteria for the protection of freshwater aquatic life (See Attachment F, Table F7 for WQBEL calculations).

12. In the Fact Sheet, page F-25, Section IV.C.3.s., Zinc.

Modify the last sentence in third paragraph to read as follows: An AMEL and MDEL for total zinc of 43– $20~\mu g/L$ and $41~\mu g/L$, respectively, are included in this Order based on CTR criteria for the protection of freshwater aquatic life (See Attachment F, Table F-8 for WQBEL calculations).

13. In the Fact Sheet, page F-28, Table F-5., Ammonia.

Modify the values for LTA (Acute) from 1.7 to 1.8, AMEL from 2.6 to 2.8, and MDEL from 5.3 to 5.6.

14. In the Fact Sheet, page F-29, Table F-7., Lead.

Modify the values for LTA (Chronice) from 0.31 to 0.331, and AMEL from 0.5 to 0.51.

15. In the Fact Sheet, page F-29, Table F-8., Zinc.

Modify the values for AMEL (Acute) multiplier from 1.0 to 1.55, and AMEL from 13 to 20 mg/l.

16. In the Fact Sheet, page F-30, Table F-10., Bis(2-chloroethyl)ether.

Modify the values for ECA (Chronic) from 0.016 to 0.031 and AMEL and MDEL from 0.025 to 0.031 and from 0.05 to 0.062 mg/l, respectively.

City of Angels

City of Angels Wastewater Treatment Plant
Proposed Tentative NPDES Permit
Regional Water Quality Control Board, Central Valley Region

Board Meeting – 3 May 2007 ITEM #6

17. In the Fact Sheet, page F-36, Section V.A.1.a., Ammonia:

Modify the Paragraph to read as follows:

The Basin Plan states that, "[w]aters shall not contain un-ionized ammonia in amounts which adversely affect beneficial uses. In no case shall the discharge of wastes cause concentrations of un-ionized ammonia (NH₃) to exceed 0.025 mg/l (as N) in receiving waters."

18. In the Fact Sheet, page F-5, Section II.A, Second Paragraph:

Modify the Paragraph to read as follows:

Currently, the disposal of secondary effluent is accomplished solely by irrigation of only 61 acres (suitable for pasture irrigation) out of 235 acres available onsite. Spray irrigation on remaining acreage is not feasible due to setbacks to property boundaries, steep slopes, close proximity to watercourses, and access roads etc. Furthermore, spray irrigation year around is also not feasible because WDR 98-110 prohibits spray irrigation during periods of precipitation and for at least 24 hours after cessation of precipitation, and to reduce the threat of unauthorized wastewater runoff from the spray disposal area into nearby surface drainage. The disposal of chlorine disinfected tertiary effluent is accomplished, as and when needed, via spray irrigation of 110 acres on the Greenhorn Creek Golf Course. During wet years, wastewater flows exceeding the land disposal and storage capacity of the Facility are proposed to be treated to a tertiary level and discharged seasonally to Angels Creek via an outfall and diffuser. Sodium hypochlorite disinfection is used when effluent is discharged solely to golf course and the UV system will be used when the effluent is discharged to Angels Creek. The dual disinfection system will be piped such that chlorinated effluent cannot be discharged accidentally to Angeles Creek. An 'air gap' will be maintained between the chlorine and the UV effluent systems as a backflow prevention device.

19. In the Fact Sheet, Section III.C., add paragraph 7., as follows:

Water Reuse Policy. The Basin Plan's Water Reuse Policy states, "The Regional Water Board encourages the reclamation and reuse of wastewater...and requires as part of a Report of Waste Discharge an evaluation of reuse and land disposal options as alternative disposal methods. Reuse options should include consideration of the following, where appropriate, based on the quality of the wastewater and the required quality for the specific reuses: industrial and municipal supply, crop irrigation, landscape irrigation, ground water recharge, and wetland restoration." The purpose of the Water Reuse Policy is to

City of Angels

City of Angels Wastewater Treatment Plant Proposed Tentative NPDES Permit Regional Water Quality Control Board, Central Valley Region Board Meeting – 3 May 2007 ITEM #6

<u>evaluate alternative methods of disposal to prevent unnecessary discharges to</u> surface water.

The Discharger disposes of treated wastewater via spray irrigation of pastureland on-site and on neighboring Greenhorn Creek Golf Course. The land discharge is regulated by Order Nos. 98-098 and 98-110. Order No. 98-110 requires that the Discharger maintain sufficient storage capacity to accommodate allowable wastewater flow, design seasonal precipitation, and ancillary inflow and infiltration during the nonirrigation season. The Discharger has documented through a feasibility study report titled, Feasibility Study for Achievina Compliance with Wastewater Permit Requirements (August 2002) that the critical element for effluent disposal to land is its effluent storage capacity, the disposal capacity is sufficient between the pastureland and Greenhorn Creek Golf Course. Currently, the effluent storage capacity of the Facility is not adequate to contain the amount of total water entering the system during a 100-year rainfall year. The near term effluent storage requirements are approximately 530 acre-feet for 100-year rainfall flows and the current storage capacity is only 202 acre-feet. Due to a lack of adequate storage capacity, the Discharger nearly experienced unauthorized overflows from its storage pond in March and April 2005.

The Discharger evaluated several land disposal alternatives, such as expanding the existing effluent storage facilities, or constructing new facilities at new sites. In addition, potential factors to reduce wastewater flows were considered and their estimated impact on effluent storage requirements were estimated. The Feasibility Study Report concludes that it is not cost effective for the City to expand its effluent storage capacity and recommends the City pursue approval of a surface water discharge.

20. In the Fact Sheet, page F-34, Section IV.D.4, Last Paragraph:

Modify the last paragraph to read as follows:

The increase in volume and mass of pollutants from the new discharge will not have significant impacts on aquatic life, municipal and domestic supply, and recreation uses, which are the beneficial uses most likely affected by the pollutants discharged. The proposed discharge to Angels Creek will not cause a violation of water quality objectives. The proposed discharge will result in some minimal degradation of waters of the state and navigable waters of the United States, but in this case, such degradation is consistent with the maximum benefit to the people of the state. Limited degradation that does not cause exceedance of water quality objectives is warranted to allow for the economic benefit stemming from local growth. In this case, the City of Angels is growing and continued treatment of wastewater is necessary to protect water quality and

City of Angels
City of Angels Wastewater Treatment Plant
Proposed Tentative NPDES Permit

Regional Water Quality Control Board, Central Valley Region Board Meeting – 3 May 2007 ITEM #6

accommodate growth. The Regional Board does not have the jurisdiction to control growth in the City of Angels, but is required to assure that the discharge is adequately treated. The proposed Order allows wastewater utility service necessary to accommodate housing and economic expansion in the area, and is considered to be a benefit to the people of the State. Additionally, the receiving water has not been designated by the State as an "Outstanding National Resource Waters". Compliance with these requirements will result in the use of best practicable treatment or control of the discharge and the impact on existing water quality will be insignificant.